

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Art Unit 2876

Jones et al.

Confirmation No. 8192

Application No.: 10/825,852

Filed: April 16, 2004

For: THREE DIMENSIONAL DATA  
STORAGE

**VIA ELECTRONIC FILING**

Examiner: E. Labaze

Date: June 23, 2006

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

MAIL STOP AF  
COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Appellants request review of the final rejection in the above-identified application. No amendment is being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheets. (No more than 5 pages are provided.)

Date: June 23, 2006

Respectfully submitted,

DIGIMARC CORPORATION

CUSTOMER NUMBER 23735

Phone: 503-469-4800  
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By



Joel R. Meyer  
Registration No. 37,677

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**REASONS FOR REQUEST FOR PRE-APPEAL REVIEW**

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Alexandria, VA 22313-1450

Sir:

Responsive to the final Office Action dated January 24, 2006, Applicant files herewith a notice of appeal, a request for pre-appeal brief review, and the following reasons for requesting the pre-appeal review.

Applicant respectfully requests reconsideration of the application to obviate the necessity of an appeal.

Claims 1-2 and 6-16 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Patent No. 5,568,555 to Shamir (“Shamir”) in view of U.S. Patent No. 5,508,826 to Lloyd (“Lloyd”).

Claims 3-5 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shamir as modified by Lloyd in view of U.S. Patent No. 6,633,321 to Maurer (“Maurer”).

Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shamir as modified by Lloyd in view of U.S. Patent No. 6,242,156 to Teng.

Applicant respectfully submits that Lloyd does not teach the claim elements for which it is cited and may have been misinterpreted. Therefore Applicant is requesting a pre-appeal review to address this issue and avoid the necessity of an appeal.

Regarding claim 1, the Office acknowledges that Shamir does not teach “the storage element includes a plurality of pixels that have been selectively darkened or whitened relative to the calibration element encode data.” The Office’s comment refers to the claim language added to claim 1 as follows: “wherein the computer readable data storage element includes a plurality of pixels that have been selectively darkened or whitened relative to the calibration element by laser radiation to encode machine readable data in the computer readable storage element.”

Though Shamir does not teach this aspect of claim 1, Lloyd is cited as teaching the claimed computer readable data storage element. Applicant believes that Lloyd does not provide the teaching of the elements of claim 1 acknowledged to be missing from Shamir.

First, claim 1 recites that the computer readable data storage element is formed on the printable layer. In contrast, the Office relies on a memory 223 of Lloyd as teaching this element, yet memory 223 is not formed on the printable layer as claimed.

Second, Lloyd does not teach “the computer readable data storage element includes a plurality of pixels that have been selectively darkened or whitened relative to the calibration element.” Lloyd teaches a method of calibrating a color printer so that the color printer accurately reproduces color images despite variations in ink, paper or the printing system. The printer calibration process includes measuring a color print test pattern printed by the printer and using that measured data to produce a color correction look-up table that adjusts color image

values to account for paper/ink variations. Lloyd uses a 4 by 4 transformation matrix to transform measured values from the test print pattern to generate calibrated color density values for the test print pattern. The processor records these calibrated values in a calibration source file 225. The processor then uses the values to generate the color correction look up table and an error diffusion look up table. The color correction look up table is used to convert a color image's RGB values into CMYK ink densities.

Lloyd does not selectively darken or whiten pixels formed on a printable layer as claimed. Note that claim 1 refers to selectively darkened or whitened pixels of a computer readable storage element that is defined as a data element formed on the printable layer. In contrast, Lloyd's calibration changes how the printer converts RGB values of an image before it is printed into CMYK values used to control the printing of CMYK ink. Lloyd is concerned only with accurate color representation not darkening or whitening printed pixels. Moreover, Lloyd does not teach selectively darkened or whitened pixels as claimed because it is solely focused on accurate color representation.

Finally, neither Shamir or Lloyd teach: "selectively darkened or whitened relative to the calibration element by laser radiation to encode machine readable data in the computer readable storage element" as claimed. In particular, neither teach this approach of marking a printed element by laser radiation.

Based on the foregoing, it is clear that Lloyd does not teach the missing elements of claim 1 from Shamir. Moreover, since Lloyd is concerned with calibration of a printer as opposed to encoding machine readable data in printed pixels and further does not teach the selectively darkened or whitened pixels of a printed data storage element, there is no motivation to combine these references. Even if they were combined, they fail to teach all of the elements of the claims because Lloyd is missing several elements of claim 1 that the Office acknowledged are missing from Shamir.

Applicant requests the Examiner to reconsider the final rejection and re-open prosecution, allowing at least one or more of the pending claims. Applicant believes that several of the claims are independently patentable, including the dependent claims. However, since there are significant deficiencies in the combination of Shamir and Lloyd, the other issues are not addressed at this time.

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